COURSE DESCRIPTION CARD - SYLLABUS

Course name
Introduction to Cognitive Science

Course

Field of study
Artificial Intelligence

Year/Semester
2/3

Area of study (specialization)

Profile of study
general academic

Level of study
Second-cycle studies

Course offered in
English

Form of study
full-time

Requirements
elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials
30

Projects/seminars

Number of credit points

3

Lecturers

Responsible for the course/lecturer:
PhD hab. Eng. Ewa Więcek-Janka

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Faculty of Engineering Management

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Responsible for the course/lecturer:
PhD Eng. Joanna Majchrzak

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Prerequisites

Student has engineering abilities and teamwork skills. Student is capable to summarise the most important information from scientific and research references.

Course objective

The objective of the course is to introduce the actual knowledge about the mind and attempt to understand the human whit the reference the various sources and fields of knowledge.

Course-related learning outcomes

Knowledge

1. Student knows the economic, legal and other determinants of the activities of IT companies [K2st_W8].

2. Student has basic knowledge of management and running a business and individual entrepreneurship [K2st_W9].

Skills

1. Student is able to use information and communication techniques used in the implementation of IT projects, in particular in the field of artificial intelligence [K2st_U2].

2. Student can communicate both in Polish and English using different techniques in a professional environment and in other environments, also using IT tools [K2st_U12].

Social competences

1. Stident is aware of the need to develop professional achievements and comply with the rules of professional ethics [K2st_K4].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: maxiumum score is 100 points (50 points for essay, 50 points for written assignment).

Tutorial: maxiumum score is 100 points (teamwork in preparation and participation in Oxford debate - 80 points, summary and reasoning - 20 points).

Marks: 2.0 – from 50 points, 3.0 – from 51 to 60 points, 3.5 – from 61 to 70 points, 4.0 – from 71 to 80 points, 4.5 – from 81 to 90 points, 5.0 – from 91 to 100 points.

Programme content

Introduction to the issue of cognitive science.

The concept of two systems in the act of human mind.

Heuristics and cognitive bias, i.e., judgements in uncertain conditions.

The intuition in experts evaluations.

The approach to risk in decision making processes.

The elements of framming effect in realation to cognitive processing.

Teaching methods

Lecture, presentation, discussion, teamwork, Oxford debate.

Bibliography

Basic

Kahneman, D. (2012). Thinking, Fast and Slow, Penguin Books.

Additional

Kahneman, D., Slovic, S. P., Slovic, P., & Tversky, A. (Eds.). (1982). Judgment under uncertainty: Heuristics and biases. Cambridge university press.

Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In Handbook of the fundamentals of financial decision making: Part I (pp. 99-127).

Levin, M., & Hayes, S. C. (2009). ACT, RFT, and contextual behavioral science.

Klawiter, A. (2008). Formy aktywności umysłu. Ujęcia kognitywistyczne. Emocje, percepcja, świadomość, Warszawa: Wydawnictwo Naukowe PWN.

Magrini, M. (2019). Mózg. Podręcznik użytkownika. Wydawnictwo Feeria.

Ohme, R. (2017). Emo sapiens: harmonia emocji i rozumu. Wydawnictwo Bukowy Las.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	45	1,5

[1] delete or add other activities as appropriate